Pest Update (March 3-10, 2010)

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http://www.state.sd.us/doa/Forestry/educational-information/Pest-Alert-Archives.htm.

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Maple Syrup Season

I always receive a few calls once the weather begins to warm on how to tap a maple tree for syrup. People notice those "frozen waterfalls, "sapicles", extending from fresh wounds on maples and think about tapping the tree. The season is just about upon us in South Dakota as the sap begins to run when the day temperatures are above 40^{o}Fs and the nights are below 20^{o}Fs. Ideally the soils are moist and even better, snow covered, I think that fits this year!.

We don't have maple syrup producers in South Dakota due to the rarity of sugar maple stands of sufficient size to

warrant the effort but you still can produce syrup from the maple tree in your yard. The tree must be a healthy maple tree, do not tap ones that have dead and dying branches nor tap a tree that has decay, long scars or cavities present. The ideal maple tree is one that is stout, a large short trunk and then lots of branches and a big round crown.

Once you have selected a good candidate, measure around the trunk of the tree, its circumference, at about 4 feet from the ground. If the maple tree is at least 32 inches in circumference, it is large enough to tap. You can place one tap in a maple tree that is between 32 and 60 inches in circumference. You can add another tap if the tree is larger than 60 inches and the two taps should be spaced roughly equal distances around the trunk. I do not recommend homeowners place more than two taps in a tree regardless of its size.

Once you determine how many taps you can use, start constructing the taps. Start with a section of 5/16 or 7/16 inch diameter hollow copper tubing and cut it into 2-inch lengths for each tap. Next drill a similar diameter hole about 1 ½ inches into the tree, slanted slightly upward as you drill in, this allows for better flow, and tap the copper tubing about 1 inch into the hole. The best day to drill and place the tap is one that is warm, about 45^{o}F or more, as there is less chance of splitting the wood. Also be sure to use a sharp drill. The hole should be placed about 3 to 5 feet above the ground and no closer than 6 inches to an older tap hole.

Place a one-gallon bucket beneath each tap. You'll probably have to hang the bucket from a nail and put a cover over most of the bucket to reduce debris from collecting in the sap (stainless steel milking pails work great). Once the sap begins to flow it may continue to so for anywhere from two to six weeks. The early season's sap is light and low in sugars. As the season progresses the sap becomes dark and sweet. The season ends when the buds are beginning to expand as the sap become cloudy and less sweet as well as an off-flavor, almost a bitter butterscotch taste. Once the season is over, remove the taps from the tree with a pair of pliers. Do not place anything into the hole and do not use the same hole the next year or drill one directly above or below it in the following year.

During the sap run a single tap may produce anywhere from 1/4 to 1 gallon of sap per day though the sap will not flow every day. If the tree is a sugar maple the sap may be anywhere from 2 to 6 percent sugar. It is typically much less for other maple species. The general rule for syrup is a ratio of 35 to 1 for sugar maple, meaning 35 gallons of sap will boil down to 1 gallon of syrup. Silver maples it may be more 40 or 50 to 1 (though there are silver maples with as sweet of sap as sugar maples in South Dakota). Boxelder, a tree that many do

not realize is a maple, has an 80 to 1 ratio, not too good but sweet enough that the Lakota use to tap these trees for the sugar.

Most folks are not going to obtain enough sap from their yard trees to make syrup and boiling it down is not an easy task. The best use for the sap may be for your coffee or cooking. The raw sap can be kept for several days in the refrigerator. I like to use it for my coffee water in the morning. The raw sap adds just enough sweetness for my taste and even gives a slight maple flavor to the coffee (and it's another excuse to drink a gallon of coffee a day).

Also if you see a maple or birch "bleeding" from a recent pruning cut. Don't worry; the sap flow will not hinder the tree's ability to protect the wound. Do not paint the cut or apply wound dressing. If you are one of those people that faint at the sight of sap, prune maples and birch in late summer, as wounds at that tree will not results in sap flow.

Samples received

Pennington County (Division) **Is this salt injury on this ponderosa pine?**

The symptoms are certainly consistent with salt injury, brown tips with an abrupt transition between the green base and the dead tips. However, these symptoms can sometimes be due to other stressors so I analyse the tissue and report the results back to you as soon as they are completed.